

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) An aircraft fuel tank system comprising:

at least one aircraft fuel tank;

an air separation device producing nitrogen-enriched air, and

a control device controlling ~~operable to control~~ said air separation device to supply nitrogen-enriched air into said at least one aircraft fuel tank during cruise conditions and to supply nitrogen-enriched air at a higher flow rate during descent, whereby the air separation device provides the whole of the mass of gas required to maintain the pressure ~~difference~~ ~~across the walls of~~ the fuel tank at or above the ambient pressure during descent ~~below a predetermined threshold is~~ provided by ~~said air separation device, without inward venting of~~ ambient air.

2. (cancelled)

3. (previously presented) The aircraft fuel tank system as claimed in Claim 1, wherein said air separation device in use provides nitrogen-enriched air having a high concentration of nitrogen at low mass flow rates, and a low concentration of nitrogen at high mass flow rates, wherein said high concentration is higher than said low concentration, and said high mass flow rate is higher than said low mass flow rate.

4. (previously presented) The aircraft fuel tank system as claimed in claim 1, including a distribution network distributing the nitrogen-enriched air at a number of spaced locations in said at least one aircraft fuel tank, thereby in use to reduce variations in concentration of nitrogen within said tank.

5. (previously presented) The aircraft fuel tank system as claimed in claim 1, wherein said air separation device comprises a Hollow Fibre Membrane.

6-7. (canceled)

8. (currently amended) A method of inserting at least one aircraft fuel tank, ~~which comprises comprising:~~

operating an air separation device during cruise conditions to deliver nitrogen-enriched air with a high

concentration of nitrogen at a low mass flow rate into said aircraft fuel tank; and

operating said air separation device during descent conditions to deliver nitrogen-enriched air with a lower concentration of nitrogen and at a high mass flow rate, whereby the air-separation device provides the whole of the mass of gas required to maintain the pressure difference across the walls of the or each fuel tank ~~below a predetermined threshold, without inward venting of ambient air at or above the ambient pressure~~ during descent,

wherein said high concentration is higher than said low concentration, and said high mass flow rate is higher than said low mass flow rate.

9. (currently amended) The aircraft fuel tank system as claimed in claim ~~1~~ 2, including a distribution network distributing the nitrogen-enriched air at a number of spaced locations in said at least one aircraft fuel tank, thereby in use to reduce variations in concentration of nitrogen within said tank.

10. (cancelled)

11. (currently amended) The aircraft fuel tank system as claimed in claim 1 2, wherein said air separation device comprises a Hollow Fibre Membrane.

12. (previously presented) The aircraft fuel tank system as claimed in claim 3, wherein said air separation device comprises a Hollow Fibre Membrane.

13. (previously presented) The aircraft fuel tank system as claimed in claim 4, wherein said air separation device comprises a Hollow Fibre Membrane.